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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/588,508	06/06/2000	Guy Lynn Guthrie	AT9-99-505	8141

7590 07/02/2004

Dillon & Yudell LLP
8911 North Capital Of Texas Highway
Suite 2110
Austin, TX 78759

EXAMINER

LI, AIMEE J

ART UNIT	PAPER NUMBER
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2183

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/588,508

Applicant(s)

GUTHRIE ET AL.

Examiner

Aimee J Li

Art Unit

2183

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 03 June 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
(a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ they raise the issue of new matter (see Note below);
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 1-11.

Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☒ Other: See Continuation Sheet

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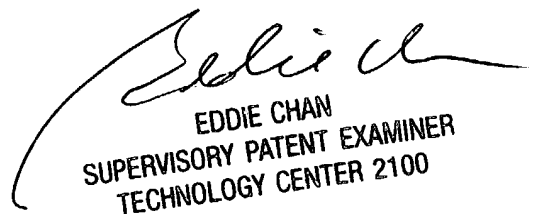
Continuation of 2. NOTE: Applicant has proposed to move the limitation found in claim 2 into claim 1 and the limitation found in claim 6 into claim 5. However, the rejections for claims 3, 7, and 8, dependent on claims 1 and 5, now incorporate the limitation found in claim 2. Therefore, further search and consideration is needed for claims 3, 7, and 8 which now incorporate a limitation not previously found in these claims.

Continuation of 10. Other: Applicants' argue in essence on pages 6-8

"Applicants' claimed invention thus requires every memory access operation be signaled as 'complete' in the correct program order from the processor's perspective. Every memory access request is thus followed by a barrier operation. The controller actually generates these barrier operations following issuance of each memory access request.

...However, the barrier operations in Sproull are inserted (by a programmer) with the functional objective of separating successive memory operations when those successive operations reference the same memory address... Thus, the Sproull barrier operations are directed to programmer-specified memory protection based upon matching addresses, and not to the presently claimed controller-specified maintenance of instruction order from the perspective of the processor."

This has not been found persuasive. In Sproull, Figure 3a is not an instruction stream, rather a request stream that is issued from the processor to a memory subsystem (Sproull column 7, lines 60-62). The request stream is NOT the same as an instruction stream issued from the programmer to a processor. A request stream refers to a processor defined stream to the memory subsystem. The barrier, MEMIBAR in figure 3a, is not an instruction from the programmer, as assumed by the Applicants. Sproull states in column 7, line 67 to column 8, line 7 that the MEMIBAR label should NOT be confused with MEMBAR instructions, which are the instructions inserted by the programmer. The MEMIBAR requests are sent from the processor to the memory subsystem, which indicates that the MEMIBAR does not necessarily mean a MEMBAR instruction was present in the programmer instruction sequence. Furthermore, Sproull in column 8, line 58-59 states "...the processor need not introduce barrier requests to enforce ordering of requests when one of the requests has already been acknowledged by the memory system." This statement, when taken in light of the previous statements above, especially the statement in column 7, lines 60-62, indicates that the processor is introducing the barrier requests not the programmer. According to Merriam Webster's Collegiate Dictionary Tenth Edition ©1997, introducing something means to lead or bring in especially for the first time (definition 1) or place, insert (definition 4). Therefore, in light of Sproull's description of Figure 3, especially the statements cited above, and the definition of "introduce", the processor of Sproull through some control means automatically produces a barrier operation.


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